

AMENDMENTS TO THE CLAIMS

Please amend the Claims as follows. Insertions are shown underlined while deletions are ~~struck through~~. Please add Claims 19 and 20.

1 (currently amended): An electric power system comprising a plurality of electric power generator sets, each of the electric power generator sets comprising:

an engine;

a generator driven by the engine;

an inverter having an ability of interconnecting the generator with an external power supply ~~by an inverter and driven by an engine~~;

means for detecting information concerning electric power from the external power supply and electric power from the electric power generator set;

means for calculating ~~the~~ electric power and energy from the external power supply, ~~the~~ electric power and energy from the power generator set, and ~~the~~ electric power and energy to a load;

means for ~~registering~~ recording each of the calculated electric powers and energies; and

a control system for controlling output of the generator,

wherein

the electric power system is constructed by interconnecting the control systems with each other, and

one of the control systems serving as a master unit comprises means for accumulating information ~~of~~ on generated power required of the other power generator set(s), the information being transmitted from the other control system(s) of the other power generator set(s); calculating the load electric power of the electric power system; and determining the number of the power ~~generators~~ generator sets to be operated.

2 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 1, wherein each of the power generator sets comprises:

image-displaying means for displaying a diagram of each ~~of the~~ electric ~~energies~~ energy of the external power supply, the power generator set and ~~at~~ a load.

3 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 1, wherein each of the power generator sets comprises:

means for calculating fuel consumption of the engine, and
image-displaying means for displaying each of the electric ~~energies~~energy and the fuel consumption in a table.

4 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 1, wherein each of the power generator sets comprises:

means for externally transmitting ~~the calculated~~a result calculated by said calculating means.

5 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 1, the power generator sets being connected in parallel, wherein each of the power generator sets comprises:

means for controlling its own generator and inverter cooperatively, and

means for detecting current value from the external power supply.

6 (currently amended): The electric power system ~~comprising the power generators~~ as set forth in claim 5, wherein the control system of each of the power generator sets comprises:

means for communicating with the control system of the other power generator sets, and

means for centralized control over the other control systems so as to enable the control systems to serve as the master unit.

7 (canceled)

8 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 71, wherein the control system ~~set~~-serving as the master unit comprises:

means for controlling the counted power generator sets to be operated so as to equalize their outputs.

9 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 71, wherein the control system serving as the master unit comprises:

means for controlling specific one of the counted power generator sets to be operated so as to maximize output thereof.

10 (currently amended): The electric power system ~~comprising the power generator sets~~ as set forth in claim 71, wherein the control system serving as the master unit comprises:

means for recognizing operation/rest state of its own power generator set or the other power generator set(s) and choosing ~~the~~a control system serving as a next master unit.

11 (currently amended): ~~The electric power system comprising the power generator sets-as~~ set forth in claim 71, wherein the control system serving as the master unit comprises:

means for shifting the power generator set to be operated at each predetermined period.

12 (currently amended): ~~The electric power system comprising the power generator sets-as~~ set forth in claim 71, wherein the control system serving as the master unit comprises:

means for preventing reverse power flow to the external power supply by cooperating with the other control system(s).

13 (currently amended): A system comprising a power generator set ~~further~~ comprising:

an engine;

a generator driven by the engine;

an inverter having an ability of interconnecting the generator with an external power supply ~~by an inverter and driven by an engine;~~

means for detecting information concerning electric power of each of the external power supply and the power generator set;

means for calculating electric power and energy of each of the external power supply, the power generator set and a load;

means for ~~registering~~recording each of the calculated powers and electric energies; and

waste heat recovery means for recovering waste heat from the engine so as to generate heat;

means for detecting information concerning heat energy consumed for generating hot water;

means for calculating the heat energy, an amount of the heat energy and energy efficiency;

means for ~~registering~~recording ~~the calculated~~a result calculated by said means for calculating the heat energy; and

image-displaying means for displaying each of the electric ~~power~~power of the external power supply, the power generator set and the load of the system, the amount of heat energy, and the energy efficiency in a table.

14 (currently amended): The system ~~comprising the power generator set as set forth~~ in claim 13, further comprising:

means for calculating fuel consumption for driving the engine; and

image-display means for displaying each of the electric ~~energies~~energy, the heat energy, and the fuel consumption in a table.

15 (currently amended): The system ~~comprising the power generator set as set forth~~ in claim 13, further comprising:

means for externally transmitting the calculated result.

16 (currently amended): The system ~~comprising the power generator sets as set forth~~ in claim 13, further comprising:

means for remote communication ~~such as to~~ enable the system to be operated remotely.

17 (currently amended): The system ~~comprising the power generator sets as set forth~~ in claim 13, further comprising:

means for detecting abnormality of the system based on the calculated result and informing about the abnormality.

18 (currently amended): The system ~~comprising the power generator sets as set forth~~ in claim 13, further comprising:

means for minimizing ecological load or power cost based on the calculated result.

19 (new): A method of generating power using a plurality of electric power generator sets, each comprising: an engine; a generator driven by the engine; and an inverter having an ability of interconnecting the generator with an external power supply, said method comprising:

(I) operating each electric power generator set by:

detecting information concerning electric power from the external power supply and electric power from the electric power generator set;

calculating the electric power and energy from the external power supply, the electric power and energy from the power generator set, and electric power and energy to a load;

recording each of the calculated electric powers and energies; and
controlling output of the generator by a control system;

(II) interconnecting the control systems with each other, wherein one of the control systems serves as a master unit; and

(III) operating the master control system by:

accumulating information on generated power required of the other power generator set(s), said information being transmitted from the other control system(s) of the other power generator set(s);

calculating the load electric power of the electric power system; and
determining the number of the power generator sets to be operated.

20 (new): A method of generating power using a power generator set comprising: an engine; a generator driven by the engine; and an inverter having an ability of interconnecting the generator with an external power supply, said method comprising:

detecting information concerning electric power of each of the external power supply and the power generator set;

calculating electric power and energy of each of the external power supply, the power generator set, and a load;

recording each of the calculated powers and electric energies; and

recovering waste heat from the engine so as to generate heat;

detecting information concerning heat energy consumed for generating hot water;

calculating the heat energy, an amount of the heat energy, and energy efficiency;

recording the calculated results; and

displaying each electric power of the external power supply, the power generator set, and the load, the amount of heat energy, and the energy efficiency in a table.